Customized Selection of Cosmetic Products

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According to recent studies, the demand for a wide range of cosmetics, which help to highlight the benefits and hide the disadvantages of appearance, is growing rapidly [1]. While the manufacturing processes of the cosmetic industry are actively exposed to macro automation trends [2], the mechanisms of product distribution are virtually neglected by innovation. This negative tendency is caused by the complexity of implementing innovative solutions in this field, because an information system of this level must assimilate not only demographic but also individual characteristics of potential users. For these and other reasons, we aim to develop an information system that offers quality methods and tools for automating the process of personalized selection of cosmetics. To achieve this, the following tasks must be performed:
● Investigate / analyze process features;
● Identify users involved in using the system;
● Identify the features / characteristics of such a system;
● Build a model of appropriate information system.

Having conducted market diagnostics to identify near and far analogues of the information system, we have found several solutions on the Google Play App Store platforms that are conceptually similar to the planned information system. These include YouCam Makeup, Try It On, Style My Hair. When evaluating competitive entities, we relied on the following features: functionality, intuitive interface, system loading speed and performance.

Having developed a system for evaluating and comparing the characteristics of analogs and our own information system, we conclude that the implementation of such a solution is appropriate. The future platform will have high competitiveness over its counterparts, as it will have optimized characteristics in a number of functions, in particular, the ability to customize your personal cabinet.

According to the results of competitive analysis and evaluation of participants in the process, the main function of the system is the selection and testing of cosmetics according to individual characteristics. Other features of the essence include the creation of a gallery of images and their categorization in order to save time to choose products, create photos, distribute photos in social networks, add a product to the category "Favorites", create a shopping list, place an order. The UML diagram of the use cases for describing user and functional requirements is shown in Fig. 1.

To summarize, in the cosmetics industry there is a competitive niche of automation of personalized selection of cosmetics. To meet the needs of users, the future information system will allow real-time effects to be applied in the form of cosmetics and use the automatic selection of the product. Prospects for future research are

project commercialization measures, which include drafting an investment proposal and planning activities and resources to promote it.
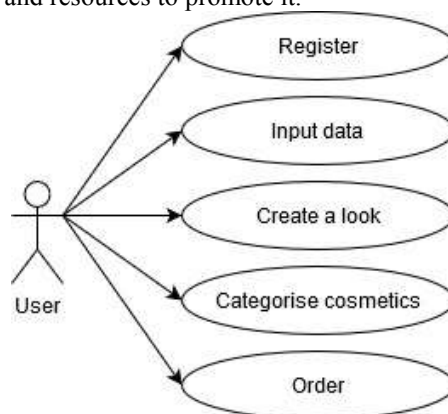

Fig. 1. UML diagram of use cases

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